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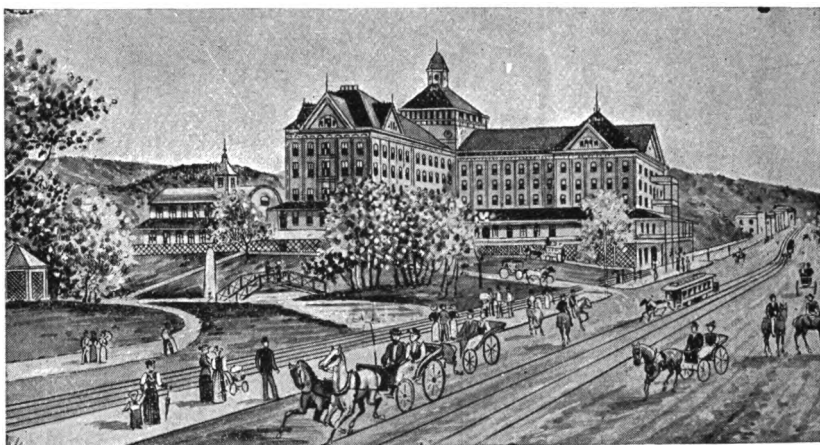
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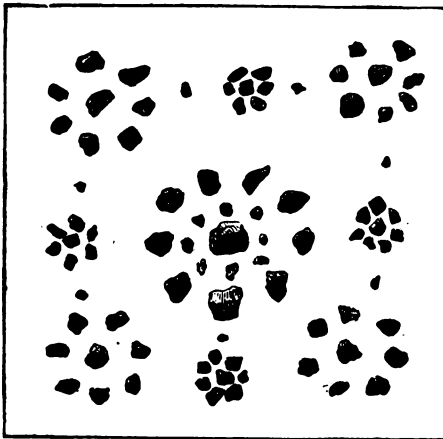


Illustration of the Calculi referred to by Dr. Claiborne. The engraving was made from a photograph and represents the exact shape of the Calculi; they are four times the above size.

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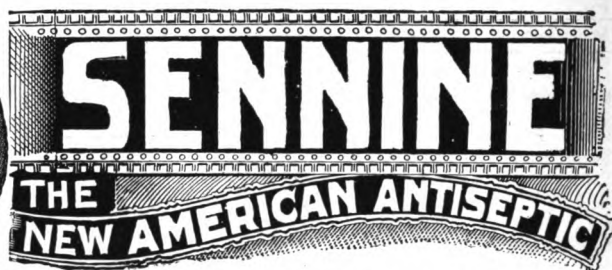
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THE HOT SPRINGS MEDICAL JOURNAL.

[PUBLISHED ON THE 15TH DAY OF EACH MONTH.]

Vol. III.] HOT SPRINGS, ARK., MARCH 15, 1894. [No. 3.

ORIGINAL ARTICLES.

REST IN JOINT AFFECTIONS.

BY J. C. MINOR, M. D., HOT SPRINGS, ARKANSAS.

There are cases of spinal affections, rheumatism and other joint troubles that come to our great sanitarium which should not be treated with the hot baths of this place until we have a complete subsidence of all active disintegration and all active inflammation. I wish to call attention to the method I have pursued in dealing with such cases.

Rest is the desideratum; and to procure this, I have relied upon plaster of paris dressing with the internal administration of reconstructive or alterative tonics as the case may seem to require. In all cases proper nourishment must not be lost sight of, but must be carefully observed. To meet this latter indication, the lists prepared by Messrs. Reed & Carnrick, of New York, have proven of great value in plainly stating to the patient what he may take and what he must avoid.

To briefly come at what I consider the classes of cases requiring this line of treatment I will cite one case from each class, and let the results reported determine upon the feasibility of the plan.

CASE I. June, 1891.—Bertie C., eleven years old, a pale emaciated deformed blonde. Strumous diathesis, with severe night pains, characteristic of Pott's disease; no appetite. On inspection, a large "boss" was to be seen between the 12th dorsal and the 1st lumbar vertebrae, at which point the spinal column made an angle of about 110 degrees. The pains had gradually become worse and were, when the case was presented for treatment, continuous daily.

The diagnosis was Pott's disease with tuberculous origin. The treatment was local and internal. With the assistance of Drs. Keller, Rogers and Hay alternately during the following eighteen months a series of plaster corsets were applied at intervals of about three months. At each time the jacket was re-applied the spinal column was brought

nearer to the normal curve. The internal treatment was, first of all, food selected according to one of the lists furnished by Reed & Carnrick to overcome the malnutrition. To this was added codliver oil in the glyconin emulsion as prepared by the local druggists. For medication nothing was given except McArthur's Compound Syrup of the Hypophosphites with Lime, and I believe did much toward building up the nervous system and feeding the bone tissue. The patient was relieved almost entirely of the pain, during the first week, and, after the application of the jacket, for eighteen months, was dismissed. She is now a healthy looking young miss, attending school regularly, and in perfect health, with little or no trace of her deformity.

The second case was that of Mr. B., of Nebraska, aged forty, a strong healthy looking yeoman. He had sustained an injury to the spine four or five years before, which had caused no symptoms which would remind him of the fact except a growing weakness in the small of the back. He, however, suffered from rheumatism in the lower extremities, and failing to be relieved by the local physician, resorted, unfortunately, to the baths at this place, and for six weeks continued to bathe, growing weaker and more feeble each week. The case was not brought under my observation until the sixth or seventh week of his sojourn. He was then in bed suffering intense pain in the spine in nearly its whole length with a continued fever of about 100 degrees. My diagnosis was chronic myelitis.

It was the opinion of both myself and the attending physician that the spine should be placed at rest in the plaster, but it was too late. The impossibility of using the Sayre apparatus was evident from the fact that exquisite pain was experienced on the slightest jar of the bed, and our patient was too debilitated to take an anæsthetic. The man continued to grow worse each day, for two or three weeks, when death from neurasthenia came to his relief.

Here the failure to put the parts affected at rest in proper time, evidently caused the death of a strong healthy man who was just the opposite type of the little girl reported above.

The baths, as given, aggravated the spinal lesion in that the general relaxation only dilated the blood vessels in the field of the tuberculous origin, nourishing this enemy while the constant friction from mobility lent its aid as an irritant.

The third case was Mr. G., of Hot Springs. Was a patient of Drs. Gaines and Thompson. Dr. Jelks and I were called in consultation, in September, 1891. Mr. G. was about forty years of age and much emaciated from a siege of fever, which had then lasted him several weeks. He had sustained some slight injury to the spine one or two years before. Abscesses had occurred along the spine,

which had either ruptured or been lanced, and it was evident from the rigors and the depression that pus absorption had taken place. It was first thought that his salvation lay in an operation for removal of dead bone; this was, however, overruled and a plaster cast applied. The first jacket was a failure from a mechanical standpoint, and was removed and supplanted by another, which with nourishment and the reconstructive tonics brought the patient to recovery in about three weeks. Several inguinal abscesses occurred during his convalescence.

CASE IV. Miss K., of Chicago; aged 18.—Sent to Little Rock to receive the benefit of southern climate for what appeared and was diagnosed rheumatism. Was referred to me June, 1893, by Dr. J. A. Dibrell, of Little Rock. On examination I found the patient inclined to be very restless, unable to sit erectly, walk or stand erectly without resting one hand or the other on her hip or thigh. Apparent rheumatic pains existed in the wrists and lower limbs. Monthly discharges very irregular and painful. Upon questioning her as to any injury to the spine, she could remember nothing of the kind, except that two years ago she slipped and fell on a stone step, which caused pain for several days in the coccyx. The spine showed a slight projection at the 12th dorsal and 1st lumbar vertebræ, which was painful to the touch and the seat of the back-ache.

Diagnosis: Myelitis. Treatment: Locally — plaster corset. Internally: McArthur's Syrup Hypophosphites. The rheumatic pains subsided as if by magic, and in two months the menstrual functions were restored. The nervous symptoms disappeared. The corset, after two weeks, was split down the front, and brought together each time it was removed for change of underwear with moleskin adhesive plaster (J. & J.).

With the assistance of the gentlemen (Drs. Rogers & Baird) who were admitted to the case in June, I applied the second corset in November last. The young lady is in perfect health now, and two weeks ago discarded the corset altogether.

Plaster of paris is equally beneficial and available in other joint troubles of syphilitic or tuberculous origin.

CASE V. Mr. R., of Richmond, Va.; aged 24. Specific and strumous history. Had a brother who has been afflicted since infancy with coxalgia. Mr. R. was put on the specific treatment here with baths. After the second week pains in the right knee and hip became so intolerable and intractable that he was advised to take the bed. He was placed in St. Joseph's Infirmary. The pains continued; opiates having no good effect.

With the assistance of Drs. Baird and Rogers I applied a spica of plaster. After two days and nights the pains ceased, the plaster removed, the patient was put on codliver oil in glyconin emulsion and McArthur's Syrup of Hypophosphites, with no specific treatment at all. After three weeks such improvement was experienced that the patient was allowed to come to the office. Baths and specific treatment resumed for nearly a month, when terrific night pains in elbows occurred. The right elbow intolerable. The plaster was resorted to with magic effect. Patient continued use of specific treatment, and made rapid progress.

I could report similar cases with similar results, but have already cited a sufficient selection to bear me out in my ideas as to the necessity for treating these different joint troubles with rest as being the most important agent.

There is a prevailing idea that plaster jackets, splints, etc., are too troublesome, too unreliable to warrant one in making use of them. But I am sure that where the best plaster is used, and put on intelligently, the result will be gratifying.

My rules are these for jacket work :

1. I use none but the best dental plaster.
2. I make bandages of cross-barred crinoline; roll them; put the plaster in a platter; then take the free end of the rolled bandage and commence rolling it loosely in the plaster.
3. I have a bucket of hot water to dip each roll in as it has to be used.
4. Allow the patient to rest the head in the Sayre jury mast with hands above the head grasping the rope. This raises the ribs so that the jacket when completed will not interfere with respiration.
5. I am careful to pad the crests of the ilia with a fold of double-faced canton flannel about the size of the hand. With this flannel I make pad for spine by taking three or four pieces, each one one-half inch narrower than the last one, and cut out a hole for the prominence, if any, in the spinal column; pin these together temporarily to the neck band of a closely fitting seamless gauze vest, and begin to apply the jacket by throwing the roller well down to the large trochanters and on up to the axillæ. When the first layer is completed I work in ten strips of galvanized iron in following order: Two down front, one on each side of the spine, and three at equal intervals, laterally.
6. I do not use alum or salt; either impairs the strength of good dental plaster.

SELECTIONS.

CREMATION.

ADDRESS TO THE GRADUATING CLASS OF MEMPHIS HOSPITAL MEDICAL
COLLEGE.

BY PROF. SHEP. A. ROGERS, M. D.*

I shall to-night occupy your time with a question which is now attracting the attention of many of our leading thinkers, a question that all, regardless of vocation or position in life, are interested in, viz.: What disposition shall we make of our dead?

To the many sentimentally inclined, burial furnishes an easy answer to this question. So like the repose of sleep is death, that as they gaze upon the closed lids and folded hands of their dead friends, the impulse is to lay their lifeless bodies reverently and quietly in a grave marked by a marble shaft and covered by flowers kept fresh by the tears of affection. But there is a large and respectable class of men who are not content with the answer to this question thus given by sentiment, and it is well that they are not content with this mode of disposing of the dead.

It may not be improper to suggest primarily that the matter of death and burial has an economic side. Statistics show that 47,000,000 of people die every year, and that to each and every one of these 47,000,000 must be allotted 2x6 feet of ground, making a total of nearly 21 square miles of the earth's surface that is each year taken up for burial purposes; and the surrender of so much space to the dead, with the rapidly increasing population of the world, will soon become a feature of enormous importance to the living. In addition, when funeral expenses incident to these 47,000,000 burials are ascertained, the economic objections to interments are strengthened.

I do not desire, however, to direct your thoughts in that line; they are considerations for the political economists. Your attention as specialists who are to have charge of public health must be directed to the unsanitary features of burial, to the cost in lives, and

*Reprint from the "Memphis Journal of the Medical Sciences."

not in dollars. That this cost in lives annually reaches far in the thousands, there can be scarcely a doubt. Among others, Pasteur has made many experiments which tend to prove that burial is a dangerous practice. One of the most striking of these was this: He buried the body of a sheep that had died of charbon twenty feet beneath the earth's surface. After a lapse of ten years time, he allowed a flock of healthy sheep to graze upon and around the grave; this resulted in death to all the flock from charbon. This instance alone, would prove nothing, but coupled with other investigations of his, Koch, Carpenter and Evert, all of which have given similar results, together with microscopical examinations of the dead animal tissue in its various stages of decomposition, show plainly that the germs which cause the charbon do not die with the body, but thrive and multiply in the decomposing carcass, and are transmitted to the earth's surface by earthworms and are then ready for new victims. Reasoning by analogy, the same would be true of the germ of yellow fever, cholera, typhus fever, phthisis, and in fact all other germs that attack the human kind. But we scarcely need reason by analogy, for our cemeteries are notorious breeders of disease. Instances are numerous where the upturning of the ground in burial places has given rise to fatal sickness. Potters' field in New York City, in 1806, was ploughed up for the purpose of converting it into a public park; this upturning of the earth liberated the germs of cholera which had been buried three years previously in the victims of that disease, and caused a terrible epidemic to sweep over that city. London had a similar experience in 1665, from the disinterment of bodies that had been buried nearly 300 years. In 1843, Minchinhampton, Eng., suffered from a plague that had not visited that place for seventy-five years, and was directly traceable to the disinterment of bodies from an abandoned graveyard. At Kelioab, a town near Cairo, the bodies of victims of a plague were disinterred 100 years after burial, and the liberated disease germs attacked new victims and caused a second plague. Modena met a similar fate from the disinterment of bodies that had been buried nearly 300 years.

Many other well authenticated instances of a similar character could be cited illustrating the dangers from this source, but another will suffice. It has been noticed that streams in the vicinity of graveyards are very apt to cause sickness, which at times partakes of an epidemic nature. In such instances the diseased germs migrate from the bodies of the victims to the water, or they may be carried there by earthworms; then they are distributed along the banks of the stream, and are ready to attack any whom they come in contact with.

There is little doubt in my mind but that Memphis owes some of her mortality to the relation of Elmwood cemetery with Bayou Gayoso. Elmwood is situated upon one of the headwaters of the bayou. This is a small, sluggish stream that pursues a serpentine course through the most thickly populated portions of the city, having every opportunity to collect from Elmwood the germs of disease and distribute them broadcast. And who knows but that the terrible epidemics of '73, '78 and '79 were but the legitimate outcome of the yellow fever germs buried with the victims of 1867?

Nor does the danger of burial end here—the earth and the water does not receive all the contamination; the atmosphere gets its pro rata. Cases are not rare where gravediggers, while disinterring bodies, have been stricken with death by the foul gas that escapes from the burial tomb. Well did Sir Henry Thompson express the dangers of burial when he said, “No body is ever placed beneath the soil without polluting the earth, the air, and the water above and around it.”

We cannot withhold our condemnation of the deleterious system, nor refrain from urging that it be abandoned. Now what substitute have we to offer for it?

Some genius, taking advantage of the chemical composition of the body, proposes to immerse it in sulphuric acid, thereby destroying the organic portions and converting the inorganic residue into the sulphates, which would consist largely of sulphate of lime or plaster of Paris. Out of this could be cast a perfect model of the dead one's face by means of a mould previously taken; this would be sanitary, and it is a beautiful idea, but of course impracticable. Cremation offers the most satisfactory solution of the question. With cremation there can be no contamination of the earth, the air, or the water. No source of disease.

Before discussing cremation as it is to-day, let us see how the ancients disposed of their dead. The primeval savage probably removed his dead to some secluded spot and allowed nature to do the rest. Later on, as population increased and man became more humane, some mode less revolting to natural instincts had to be adopted. Land being abundant, burial was the mode selected by the masses. The intelligent and wealthy, however, even in very early times, practiced cremation. The exact period when cremation first begun history fails to tell, but reference is made to the funeral pyre 2,000 years B. C., and judging from all evidence now at hand, the Orientals were the first to practice it. As to what it was indebted for its birth, authors are at variance. Some of the modern cremationists believe it to have been the result of sanitary research. I cannot quite agree with them, as it was practiced by different nations

with widely different ideas, and we even find the same nations practicing it at different periods with different ideas. The Jews, in obedience to the Mosaic code, inflicted it upon all who violated the laws of wedlock. Later on, the same race regarded cremation as an honor fitting only the most eminent of the nobility. The first king of Israel who fell giving battle to the Philistines in Gilboa was cremated by his race as a mark of distinction. The Greeks cremated all who fell in battle to prevent their mutilation by the enemy, while burial was a mark of infamy which all cowards, criminals and slaves suffered. Even Ajax was denied the funeral pyre because he suicided. The Romans practiced cremation until the advent of Christianity. Cæsar, Brutus, Antony, Pompey and Octavius were all cremated. Nero was partially so, because of his infamous career. In India from a remote antiquity, the practice has been kept up until late years. By this I mean ancient, or what might be termed unscientific, cremation, which was accomplished by placing the corpse upon a pile of wood built in the shape of an altar and after pouring balsams and other sweet-smelling substances over it, the torch was applied and the corpse burned to a few pounds of ashes.

To Prof. Brunette of Padua must be accorded the distinction of being the first to practice modern or scientific cremation. In 1873 he cremated three bodies by what is known as his process, and exhibited the ashes at the Vienna Congress. The report of this work aroused the scientific world to thought upon the subject, and in a short time societies for cremation were established in many of the leading cities of Europe.

In England, however, this mode of disposing of the dead had a hard struggle. On the 13th of January, 1874, there was founded a society of cremation in England. In 1878 a building was erected and a bill introduced by Dr. Cameron in the House of Commons to legalize cremation. The bill was defeated, in face of the fact that it was backed by Sir Lyon Playfair, Sir John Lubbock, and others of equal prominence. Gladstone was largely responsible for this defeat, and he was forced to admit that his only reason for opposition was that public opinion was against the measure. Ten years after the formation of this society, an eccentric physician living in South Wales by the name of Price, settled the legality of the question without the aid of the House of Commons. He was a descendant of the ancient Druids and followed their druidical practice of burning the dead. Taking the body of his child, he placed it in a cask of petroleum, applied the torch, and accomplished his idea of cremation. For this he was indicted and tried, but the judge, Sir James Stephens, after a diligent search, failed to find any law by which to convict the

day as to the validity of the titles advanced by different ones to the prisoner of crime and charged the jury to acquit. The result of this trial relieved the society of all embarrassment and it began operations.

In America, the first white man to be cremated was Sir Henry Laurens of Charleston, S. C., who was President of the first Colonial Congress. He was morbidly afraid of being buried alive, and on his deathbed gave instructions that his body be burned, which was done by his family with the best means at their command. The second was Sir Henry Barry of Marion, S. C. The third, and really the first whose body was cremated scientifically, was Baron De Palm, a native of Bavaria. This was done at the LeMoyne Crematory, on the 6th of December, 1876. Since which time the bodies of many prominent men in this country have been disposed of in this way in accordance with their wish expressed during life. Among them was the late Prof. S. D. Cross of Philadelphia, who in his time, was the foremost American surgeon. He was a man of wide experience, and one who had exceptional opportunities for observing the body after death. He gave the subject a great deal of thought, and to him inhumation was a horror. No wonder, then, that he should have dreaded the grave, a cold, putrid prison house, where time by its slow and loathsome process destroys all; where the brain that gave forth pure and noble thoughts, and generated great ideas, becomes the hovel of the slimy worm; where the form, once admired for its ease and grace, becomes the hotbed of putrefaction, breeding the vile insects that feed upon it, and where at the end, is only left polished bones that seem to mock our idea that inhumation is worthy of our loved ones.

With all the advantages cremation has over burial, the question naturally arises, why has it not been universally adopted! Well, there are many objections to cremation in the minds of the people, which will take time, thought and investigation to dispel. Some object on religious grounds, and as unpardonable as it may seem, these extremists construe the resurrection of the body to mean a resurrection of the identical atoms, believing the immortality of the soul to be chained to their bodies. They also believe that these atoms would be destroyed by cremation, thereby rendering resurrection impossible. On the latter proposition I would refer them to natural science, which teaches that no matter is ever destroyed; that its form only can be changed, that every atom will continue to exist. To show the absurdity of the former proposition, I would answer that the atoms now constituting our bodies have served a similar purpose for many of our forefathers. Now, if the belief of these extremists be correct, imagine the wrangle that will arise on the final

same set of atoms. 'T will really be amusing even on that awful day. I would also remind them that nature, in from twenty to one hundred years, accomplishes exactly what cremation does in two hours; one is slow, the other rapid oxidation, and resurrection of the identical body is in one case as probable as the other. The ultimate results are identical; both fulfill the same end; "ashes to ashes, dust to dust." Others cling to burial as the practice of their forefathers, for man is slow to leave the well-worn path and venture on new highways. This is especially true of any customs pertaining to the dead, and around burial time has cast a halo of reverence into which many have not the hardihood to intrude. To this opposition, no argument can be made. Time alone will dispel it. Another, and by far the greater mass of opposition to cremation, is due to ignorance—a want of knowledge as to what cremation is. Such opponents vividly picture to themselves a horrible spectacle, and cremation is condemned without a hearing. Such a picture was true of the ancient cremation, but thanks to modern science the process has been robbed of all its horrors, as will be seen by the description of the process given by an eye witness, as follows:

"The body was borne into the chapel and placed upon the catafalque, which stands in front of the altar. The section of the chapel floor upon which the body rests forms the floor of the elevator. As the funeral services proceed, the elevator invisibly and noiselessly descends, bearing the body to the basement in front of the incinerator, which by means of super-heated air has been raised to a white heat within; the door of the incinerator then opens to receive the body, the inrush of cold air causes the temperature to fall a little, giving the interior a beautiful rose tinge; the corpse, wrapped in a sheet saturated with alum, and placed upon a metallic bed, passes over rollers into a bath of rosy light. The sheet delineates the form of the body until incineration is complete; the flesh and bones crumble into ashes as it were, the result of an invisible agent. It requires from one to two hours, when a few pounds of clean, white ashes, resembling frosted silver, are dropped into an ash chamber by means of a lever, and thence drawn into a suitable urn to be returned to the catafalque by the time the funeral services are over, and the friends of the deceased find the ashes where they had last seen the body. The process has no disagreeable odor, no appearance of fire or smoke; the body vaporizes and passes off as an invisible gas."

Cremation offers nothing that could offend the feelings of the most sensitive; it is the only never-failing germicide; it is a blessing sanctioned by all the laws of God. Tried by the crucial test of science, it rises incomparably above inhumation.

In closing, gentlemen, allow me personally and in the name of your Faculty, to thank you for the uniform courtesy and attention they have received at your hands, and to urge upon you to continue your studies with the same earnestness in future as you have in the past. Conduct yourselves with that dignity becoming one of your profession—and just here I might give you that little fatherly advice usual on occasions of this kind—and that is, to live in brotherly love with your fellow-practitioners. But I know you would not heed me. I know doctors too well for that. Somehow or other, they always disagree. Place three of them in a little cross-road town and you have a triangular fight, and you can increase the angle indefinitely, provided your supply of doctors holds out. They are unlike lawyers, something like preachers—that is, they can't agree, for harmony in medicine like purity in politics, is an iridescent dream.

MEDICINAL VALUE OF WATER.

Dr. Simon Baruch recently read a paper before the New York Academy of Medicine, which was, as Prof. Loomis said, "a plea for the use of common sense in the treatment of disease." The title of the paper was *Therapeutic Reflections*. The central idea was that we should not rely too much on drugs, but more on such therapeutic agents as food, air, exercise, rest and water. The whole paper can be found in the December number of the *Journal of Balneology*. The writer says that far more actual curative results may be obtained from closely following the tendency of a disease and applying those agents which are potent in maintaining the system in health, as rest, exercise, diet, baths, a change of environment, etc., than from the most intelligent application of medicinal agents. Medication suppresses symptoms. Rest, exercise, proper adaptation of food and drink, and cleanliness are the chief agents in the so-called expectant plan of treatment. The author says that the Brandt bath has proved a most successful method of treating typhoid fever; but it must be carried out fully as its author intended. The chief hygienic remedy in chronic diseases is water. Abroad, the most prominent teachers and practitioners constantly dwell upon and prescribe it. The clinical results obtained by it, both abroad and at home, surely entitle it to a more careful investigation. Dr. Baruch says that the modern physician is still enslaved to the drug prescribing habit. He pleads, not for the abolition of drugs, but for a more methodical application of remedies like rest, exercise, diet, water and proper environment.

The paper was discussed by such men as Drs. Alfred L. Loomis, A. Jacobi, and others. All those who discussed the paper declared they were often astonished how they could carry patients safely through typhoid fever and other acute diseases with such few medicines. The number of remedies used by them had greatly dwindled down.—*Food.*

THE INCH AND A HALF INCISION AND WEEK AND A HALF CONFINEMENT IN APPENDICITIS.*

In all probability there is not a member of this audience who has not lost one or more friends from appendicitis. That remark applies not only to you, but to every man in the United States, and that means a good many deaths from one disease. These deaths would have been unnecessary if the patients were where they could have had the benefit of the inch-and-a-half incision as soon as the first symptoms of appendicitis occurred. Then, again, the subject is unfairly stated in terms of life or death, for I have tried here to lay down the cardinal principle that every hour of progress of an acute attack of appendicitis means increased damage to viscera, and the deduction is clear that patients who run the gauntlet without operation are left with many a defect and many an anxiety. The physician who reports the patient as cured after an acute attack has subsided does not intentionally make a fraudulent statement. He is so solicitous for the patient's welfare that he deceives himself. Most of the appendicitis cases that come to us deliberately for operation have been discharged as cured by their physicians. Not long ago two rival physicians were present at the bedside of the patient upon my arrival. Dr. Smith favored immediate removal of the appendix and Dr. Jones was opposed to the idea, stating that he had never lost a case under medical treatment. Dr. Smith, who was rather bluff in manner, said to Dr. Jones: "Oh, yes, I know all about your patients. The ones that died had obscure cases of typhoid fever, or intestinal obstruction, or peritonitis, and the ones that recovered were appendicitis." One reason why the members of the profession are slow in acting according to the principles involved is because no one of an artistic temperament enjoys the thought of a great gash in a fair young belly, and that is why I have developed the inch-and-a-half incision and the evanescent scar. The week and a half during which

*Lecture at N. Y. Post-Graduate Medical School, by Rob't. T. Morris, A. M., M. D.

I keep the patient in his room after this operation is less than the average time of confinement with one attack of appendicitis, and then there are no more attacks. The mass of special knowledge in the profession to-day is so great that the left hand does not know what the right hand is doing, and post-graduate instruction is of great advantage if it succeeds in simply informing men as to what others are about. If unnecessary deaths and disaster from appendicitis are occurring all around us, it does not mean that physicians are neglectful. It means only that men, by conscientious devotion to their patients' best interests, have built up an engrossing practice which, from its very magnitude, obscures the view of a small special operation. As soon as I can establish as a standard the inch-and-a-half incision and the week and a half confinement in appendicitis, the general practitioner will have no difficulty in deciding just what to do at the very outset of an attack. Some of the operations that I have done here before the class were upon physicians who came at once for operation in their own cases when they would have hesitated in sending a patient. Bear well in mind the fact that in its nature appendicitis is an infectious inflammation which persists at the focus after medical resources have caused subsidence of any one attack, and do not forget that it causes increased damage to viscera with every hour of progress.

The patient upon whom we are now to operate is a young mother, twenty-five years of age. Shortly after childbirth, a year ago, she was attacked with appendicitis, and has not been quite well since. According to my theory, the efforts of parturition crowded the appendix against the pelvic wall and crushed its adenoid layer. Bacteria entered the injured tissue, which swelled until it choked within the confining tube of muscular and peritoneal coat. If any other part of the bowel had been injured in the same way there would have been plenty of room for the swollen adenoid tube, and it would have protected the patient by its action as a strainer for bacteria, but in the appendix it met with a mechanical obstacle in the narrowness of its muscular and peritoneal sheath.

Let us measure off an inch and a half over the site of our patient's appendix and make the line oblique enough to lie in the trend of the external oblique aponeurosis. An incision three-quarters of an inch in length would suffice for this patient, and in a fleshy patient two inches might be necessary; but I am making the incision here of one length in order to establish a standard. With a little narrow scalpel I now incise down to the transversalis aponeurosis, and before opening this and the peritoneum a loop of catgut is introduced as a holder for the two latter structures, so that we can find

them ready for a neat approximation with sutures after the operation. As the peritoneum is opened you all recognize the broad longitudinal muscular ribbon which is peculiar to the colon. A bit of sodic chloride placed upon the bowel excites reversed peristalsis, and then we know in which direction to follow the colon ribbon, which leads directly to and ends exactly at the appendix. The cæcum and appendix do not come readily into the opening, so I insert one finger into the abdominal cavity and separate adhesions. This is not to be done through the small incision by any one who is not quite familiar with adhesions. Now you can all see the exposed cæcum and the mass of adventitious tissue which bears in its midst the hidden appendix. A very little dissecting exposes the tip of the appendix, and then the whole structure is liberated. It is ligated with a fine strand of eye silk close to the cæcum and the stump is buried with three Lembert sutures. If perforation should occur beneath the ligature, the new adhesion under the Lembert sutures would protect the patient. The only two deaths that I have heard of as occurring after operation "in the interval" of exacerbating appendicitis were caused by perforations of the stump below the ligature, the operators having failed to recognize the fact that perforation was very likely to occur at precisely that point, because the stump tissues, though apparently in quiescent condition, were nevertheless dangerously infected. However, this was a thing which had to be learned in the evolution of the operation before its present ideal technique had been developed. Our next step consists in lifting up on the catgut loop in the wound and accurately uniting the margins of the peritoneum, transversalis fascia and aponeurosis, and internal oblique aponeurosis. Look now at the movement of the external oblique aponeurosis as the patient breathes and you will readily understand why the surgeon would not unite all structures of the abdominal wall with one tier of sutures, while the muscles were intended by nature to glide over each other in different lines of traction. The external oblique aponeurosis sutured, an assistant puts the little skin wound upon the stretch with a couple of hooks, so that I can make a beautiful approximation of skin margins with five-day catgut and leave my evanescent scar. These patients do not have hernia after an operation of this sort. Examining the removed specimen, we observe that the larger part of the adenoid and mucosa present the white and cheesy appearance of tuberculous degeneration, while about an inch of the appendix is still whole; but, as the ostrich farmer on the Midway would say, "Bright and lively; going on all the time; no waiting for the performance." If this is tuberculous, as appendices not infrequently are, nothing could illustrate better the farce of waiting for a proper

time to operate. The insidious disease would infect the whole peritoneum before the patient was ready to demand operation.

There is no more empty mockery of wisdom than the expression "using judgment" in appendicitis, which perforates, which infects the liver or the lungs, which causes thrombosis of the blood vessels, at a moment when the patient's pulse and temperature and respiration are all normal and when there is no pain. We shall never have a classification of symptoms in this disease for the guidance of the general practitioner, because the most satanic cases may be cases with practically no characteristic symptoms, and the cases with outrageously definite symptoms may go on to almost perfect recovery. It is enough to know the nature of the disease, and then, acting from a standpoint of principle, the appendix will be removed as a matter of custom as soon as the first symptoms of appendicitis occur. In this appendix there are no seeds. Seeds in the appendix are mythical for the most part, and I hope that we shall hear less about them in future, when a more careful examination is made of the seed-like phosphatic or fatty concretions that are so common. I used to find grape seeds and apple seeds and cherry pits in the appendix, but since these have been subjected to exact chemical analysis I frequently make my luncheon of a bottle of koumiss and a couple of pounds of grapes, swallowing every seed, because I have not yet found anything excepting concretions in the whole collection of seed-like objects from removed appendices.

A member of the class asks why I scarified the peritoneum before burying the stump of the appendix in this patient. That was done in order to excite a local peritonitis for plastic purposes. We need to disturb the peritoneum pretty well in order to get a response. The peritoneum is the surgeon's little friend. It drinks up infected exudates, and it walls in the weak spots. Without the help of the peritoneum we should be unable to do successfully the many abdominal operations which are done with such ease and safety. Peritonitis as a result of surgical operations is something which occurs frequently among the older text books, but it is something with which the surgeon is unfamiliar.—*N. Y. Med. Jour.*

THE heart cannot be weakened under chloroform except by interference with the breathing. It is useless and dangerous to take the pulse as a guide. Watch the respiration. Safety is insured only by regular natural breathing.—*Lawrie in Medical Record.*

THE HOT SPRINGS MEDICAL JOURNAL.

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MARCH 15TH, 1894.

EDITORIAL.

With this issue of the JOURNAL Dr. J. C. Minor retires from its management. The success of the JOURNAL is due largely to his painstaking and methodical work.

DR. MINOR RETIRES FROM THE JOURNAL.

The present management wish the doctor the success in his professional work which his urbanity and information so abundantly deserve. We hope from time to time to publish to the profession his observations and wise deductions. Success to you, doctor.—J.

Everything points to a successful and large attendance of this organization in Hot Springs next November. Already many titles to promised papers have been sent in. It is to be hoped that the physicians from the Gulf to the Lakes, and from the Alleghanies to the Rockies, will take advantage of the liberal railroad accommodations which will be offered, and swell the membership to gigantic proportions. THE JOURNAL will be at the disposal of all who desire its assistance.

“The phenomena produced by mercury are singularly similar to those which will result from syphilis, and the serious symptoms, known as secondary and tertiary syphilis, can be produced both by syphilis and by mercury.”—*Potter*.

MERCURY IN SYPHILIS. In many cases the enormous doses of potash assist in this degeneration of tissues by destroying more red blood corpuscles than can be repaired by poor food, etc.—M.

With this issue of the JOURNAL Dr. J. T. Jelks, of this city, becomes associated with its editorial staff and management. Dr. Jelks for many years has held high and honorable positions in the ranks of his profession, besides having contributed largely to its literature. We welcome him to the professional circle, and bespeak the same from the profession at large.—H.

DR. MORTON, of Brooklyn, says of Hot Springs: “* * * The Hot Springs of Arkansas have acquired a good deal of renown in the treatment of cases of syphilis, both recent and old. The water, which contains but a small proportion of mineral substance, has the peculiarity of having a temperature of 140° as it comes from the earth, and has no direct influence upon the disease. Patients while drinking it, through its diuretic and diaphoretic action, are enabled to tolerate larger doses of mercury and iodides, and cases of inveterate syphilis who go there are benefited because their tolerance is increased, whereas if they remained at home they could not take sufficiently large doses to control their symptoms. * * *”—*Brooklyn Medical Journal*.

This eminent gentleman expresses our views almost entirely. Not only are the baths, and the drinking of the water conducive to diuresis and diaphoresis, but the advantages to be derived from the air and surroundings, and the *rest* from business duties are also to be considered.—M.

DR. SIMON BARUCH, in his “Plea for Physiological Remedies,” closes the magnificent article on the “Abolition of Drugs” in the following words: “I plead to-night not for the abolition of drugs, some of which I value as highly as any one, but for a more methodical application of remedies like rest, exercise, diet, water, and proper environments, remedies which boast of greater antiquity than any medicinal agent, remedies which have demonstrated their value in all epochs of medical history and which to-day challenge the most searching investigation.”

THE ASSOCIATION OF MILITARY SURGEONS OF THE UNITED STATES.
—*Officers, 1893-1894*: Nicholas Senn, President, Col. and Surgeon-General, Ill. N. G., 532 Dearborn Ave., Chicago; Bernard J. D. Irwin, Vice-President, Col. and Assistant Surgeon-General, U. S. A., Pullman Building, Chicago, Ill.; Louis W. Read, 2d Vice-President, Col. and Surgeon-General, N. G. Penn., Norristown; Eustathius Chancellor, Secretary, Lt.-Col. and Medical Director, N. G. Mo., 515 Olive St., St. Louis; Lawrence C. Carr, Treasurer, Major and Surgeon, N. G. Ohio, 448 W. 7th St., Cincinnati; George Henderson, Chairman Committee of Arrangements, Major and Surgeon-General, D. C. N. G., 817 T. St., N. W., Wash., D. C.

The Fourth Annual Meeting of "THE ASSOCIATION OF MILITARY SURGEONS OF THE UNITED STATES," will be held in Washington, D. C., May 1st, 2d and 3d, 1894.

This National Organization is composed of Medical Officers of the U. S. Army, U. S. Navy, National Guard of the United States, and the Hospital Marine Service—in whose service are many of the most celebrated and distinguished surgeons of our country. A brilliant and able literary programme will be presented. The afternoon of one day will be set apart for an object lesson from the "Manual of Drill," by the Hospital Corps. The evenings will be given up to social entertainments. There will be about five hundred delegates in attendance.

It is now an acknowledged fact that the Incline Railway to the summit of West Mountain will be finished before next fall. In the franchise given by the government, a hotel at the summit is assured. This will be a judicious enterprise, and will without doubt increase the number of visitors to this perennial resort during the summer months. There is no doubt but all dyscrasia and cachexiæ are more successfully treated here in the spring, summer and fall than during the winter.

THE partnership existing between Dr. J. M. Keller and Dr. T. E. Holland, was dissolved by mutual consent last November. Both gentlemen are occupying their former offices.

THE weather for the present winter season at Hot Springs has been unexceptionally beautiful, and results in treatment have been proportionably gratifying.

At least two hundred physicians registered as guests in Hot Springs during February and March.

DR. SHEP A. ROGERS has returned to Memphis and will resume his professorial and professional duties.

THE Avenue Hotel is reaping a full share of the guests who are arriving daily by the hundreds.

THE Park Hotel can boast of a large and most select crowd of delighted guests.

SUBSCRIBE for THE HOT SPRINGS MEDICAL JOURNAL,

THE Arlington Hotel is full to overflowing.

VITAL STATISTICS.—CITY OF HOT SPRINGS.

Total number of deaths for the month of January, was 19.

CAUSES OF DEATHS.—Inflammation of Stomach, 1; Pyemia, 1; Membranous Croup, 1; Congestion, 2; Teething, 1; Inflammation of Bowels, 1; Consumption, 3; Tetanus, 1; Continued Fever, 1; La Grippe, 3; Diarrhoea, 1; Pneumonia, 2.

CLASSIFICATION OF DISEASES.—Zymotic, 4; Local, 10; Violent, 1; Developmental, 1; Constitutional, 3.

CLASSIFICATION OF PERSONS.—Males, 9; Females, 10; White, 9; Colored, 10; Residents, 10; Visitors, 9; Adults, 8; Under Age, 11.

SOCIAL RELATIONS.—Married, 5; Single, 3; Widowed, 0; Under Marriageable Age, 11.

OCCUPATIONS.—Railroad Man, 1; Laborers, 2; Telephone Operator, 1; Housewives, 2; Cook, 1; Clerk, 1; Under Age, 11.

AGES IN PERIODS OF TEN YEARS.—Under 10 years, 9; From 10 to 20 years, 2; From 20 to 30 years, 5; From 30 to 40 years, 1; From 40 to 50 years, 9; From 50 to 60 years, 2.

WARDS.—First Ward, 4; Second Ward, 5; Third Ward, 3; Fourth Ward, 1; Fifth Ward, 3; Sixth Ward, 3.

CEMETERIES.—Greenwood, 11; Hollywood, 3; Catholic, 0; Jewish Rest, 0; Removed out of the city, 5.

PER CENT OF DEATHS TO THE 1,000—Visitors and Citizens, 9.90; Residents, 7.

AVERAGE LIFE.—Average Life, 15 years, 10 months, 15 days.

BIRTHS.—The total number of births reported was 11. Males, 7; Females, 4; White, 7; Colored, 4; Living, 9; Stillborn, 2.

A remarkably large portion of young people have died during the month and consequently the average life is very low.

MONTHLY REPORT OF THE HEALTH DEPARTMENT, CITY OF HOT SPRINGS, ARK., JANUARY, 1894.

PER CENT OF DEATHS IN A FEW OTHER CITIES AND TOWNS.

Albany, N. Y.,	for 10 months, 1892.....	26.27	Macon, Ga.,	for the year, 1892.....	19.43
Baltimore, Md.,	" the year, ".....	25.23	Milwaukee, Wis.,	" ".....	17.51
Boston, Mass.,	" ".....	23.92	Mobile, Ala.,	" 11 months, ".....	25.27
Bridgeport, Conn.,	" ".....	15.95	Nashville, Tenn.,	" the year, ".....	18.27
Brooklyn, N. Y.,	" ".....	21.94	New Haven, Conn.,	" ".....	20.58
Buffalo, N. Y.,	" ".....	20.00	New Orleans, La.,	" ".....	23.88
Charleston, S. C.,	" ".....	28.47	New York, N. Y.,	" ".....	24.02
Chattanooga, Tenn.,	" ".....	14.07	Paterson, N. J.,	" ".....	27.45
Chicago, Ill.,	" ".....	20.01	Pensacola, Fla.,	" ".....	19.53
Cincinnati, Ohio,	" ".....	20.37	Philadelphia, Pa.,	" ".....	21.96
Cleveland, Ohio,	" ".....	18.02	Pittsburgh, Pa.,	" ".....	21.24
Concord, N. H.,	" 10 months, ".....	21.36	Providence, R. I.,	" ".....	21.47
Dayton, Ohio,	" the year, ".....	16.94	Richmond, Va.,	" ".....	23.93
Detroit, Mich.,	" ".....	24.93	Rochester, N. Y.,	" ".....	18.92
Evansville, Ind.,	" ".....	17.50	San Antonio, Tex.,	" ".....	21.74
Hartford, Conn.,	" ".....	21.37	San Francisco, Cal.,	" ".....	19.60
Jersey City, N. J.,	" ".....	28.37	Syracuse, N. Y.,	" 10 months, ".....	18.26
Knoxville, Tenn.,	" 11 months, ".....	17.55	Troy, N. Y.,	" 10 ".....	25.12
Los Angeles, Cal.,	" the year, ".....	13.95	Washington, D. C.,	" the year, ".....	25.50
Louisville, Ky.,	" 11 months, ".....	15.44	Worcester, Mass.,	" ".....	19.80
Lynn, Mass.,	" the year, ".....	17.50	Hot Springs, Ark., Residents and Visitors.....		12.50
Lynchburg, Va.,	" 10 months, ".....	20.31	Hot Springs, Ark., Residents.....		8.26

AREA OF CITY AND EXTENT OF PUBLIC IMPROVEMENTS.

Population (resident and visiting).....	23,000	Acres in Parks, including Government Reservation.....	888.7
Residents.....	17,000	Lineal Miles of Street.....	80
No. of visitors during the year.....	70,000	Miles of Electric Street Railway.....	10
No. of Daily Papers.....	3	Miles of Street Railway—Horse.....	1/2
No. of Weekly Papers.....	5	Miles of Main Sewer.....	6.13
No. of Monthlies, Illustrated.....	2	Capacity Arctic Ice Factory per day in Tons... ..	25
No. of Job Printing Offices.....	5	" Cold Storage " " " ".....	15
Medical Journal.....	1	" Valley " " " ".....	15
Churches.....	22	Miles of Gas Main.....	5
Schools.....	10	Miles of Water Main.....	13
Hotels, Boarding Houses and Furnished Houses, more than.....	500	Fire Hydrants.....	75
Banks.....	3	Capacity of Water Works per day in gal. ions.....	2,250,000
Drug Stores.....	25	Miles of Telephone Wire.....	190
Physicians.....	77	Miles of Electric Light Wire.....	44
Planing Mills and Sash and Door Factories... ..	3	Hot Springs.....	72
Grist Mills.....	1	Bath Houses.....	21
Miles in City.....	5	Steam Laundries.....	3
Acres in City.....	3,200		

SANITARY WORK.

	Sept.	Oct.	Nov.
Sanitary orders issued.....	321	245	337
Sanitary orders obeyed (so far as known).....	285	237	237
Privies cleaned.....	259	230	229
Privies repaired, boxed, etc.....	2	4	10
Dead animals removed.....	6	5	8
Plumbing repairs to closets.....	4	3	8
Sewer connections ordered.....	6	7	2
Sewer connections made.....	0	1	3
Slops and trash removed, loads.....	3	4	2
Suits for violations.....	5	8	4
Fines for violations.....	\$20.00	\$45.00	\$15.00

* REMARKS. *

ELEVATION.

Valley, No. feet above Gulf of Mexico.....	609.5
Top of mountain on either side.....	1,200
Latitude.....	34° 31' N
Longitude.....	92° 30' W

PER CENT OF DEATHS.

	1888.	1889.	1890.	1891.
Visitors and Citizens.....	8.10	10.25	9.95	12.52
Residents.....	5.92	7.64	7.42	10.02

TEMPERATURE.—1888, lowest, 13° above zero; highest, 96°; mean, 55.17°; range of, 8.3°—1889, lowest, 14° above zero; highest, 89°; mean, 68.06°—1890, lowest, 13° above zero; highest, 85°; range of, 87°—1891, lowest, 61° above zero; highest, 98°; range of, 84°.

RAINFALL.—No. of inches, 1888, 63.50; 1889, 50.77; 1890, 79.93; 1891, 70.86.

AVERAGE AGE AT DEATH.—1889, 37 years, 8 months and 6 days; 1890, 34 years, 3 months and 4 days; 1891, 33 years, 6 months and 4 days.

MISCELLANEOUS.

BOOKS AND PAPERS RECEIVED.

CRITIQUE OF MICROSCOPIC EXAMINATION OF SPECIMENS REMOVED IN THIRTY-TWO CONSECUTIVE LAPAROTOMIES (with one death). By F. Byron Robinson, B. S., M. D., Chicago. Reprint from Journal of American Medical Association.

TAIT'S PERINEAL FLAP OPERATION. By F. Byron Robinson, B. S., M. D., Chicago. Reprint from Chicago Medical Recorder.

NASO-PHARYNGEAL DISEASES. By H. N. Spencer, A. M., M. D., St. Louis. 1894, J. B. Lippincott Company, Philadelphia, publishers.

A comprehensive and valuable lecture on a most important subject.—MINOR.

FEBRUARY EXCHANGES CONTAINING SPECIALLY VALUABLE ARTICLES.

The American Therapist, The Texas Sanitarian, The Lancet Clinic, The International Journal of Surgery, Virginia Medical Monthly, New York Polyclinic, The Western Medical Reporter, Medical Summary, N. E. Medical Monthly, The Brooklyn Medical Journal, Buffalo Medical and Surgical Journal, Medical Review.

THE government improvements are progressing rapidly under the untiring engineering efforts of Capt. Robt. R. Stevens, and at no distant future the parks of Hot Springs will compare favorably with those of Monte Carlo and other European resorts in the magnificence of drives, walks, imposing masonry, and floral and horticultural effects.

MYALGIA.—

R	Salophen,	3i.
	Liq. Tong. Sal.,	3iii.
	Glycerine,	3i½.
	Spts. Frumenti,	3i½.
M.	Sig. Tablespoonful every four hours.	

DIURETIC AND RHEUMATIC.—

- R Lithium Salicylate, 3ii.
 Liq. Tong. Sal., 3iii.
 Glycerine, 3i.
 Aqua Mentha Pip., 3ii.

M. Sig. Two teaspoonfuls every two hours.

NERVOUS HEADACHE.—

- R Potass. Brom., 3iv.
 Liq. Tong. Sal., 3viii.

M. ft. sol. Sig. Teaspoonful every hour until the desired effect is secured.

MALARIAL NEURALGIA.—

- R Acetanylid, 3iv.
 Liq. Tong. Sal. 3viii.

M. ft. sol. Sig. Teaspoonful every four hours.

LA GRIPPE.—

- R Benzoate Sodium, 3i.
 Glycerine, 3i.
 Liq. Tong. Sal., 3iii.
 Aqua Mentha Pip., 3ii.

M. Sig. Teaspoonful every two to four hours.

CHRONIC ALCOHOLISM.—

- R Tinct. Capsici, 3iv.
 Tinct. Nucis Vom., 3iv.
 Celerina, 3iii.
 Syr. Bromide Comp. (Peacock), 3iv.

M. Sig. Teaspoonful in water four times daily.

Very valuable for old worn-out drunkards.

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FLUID BEEF EXTRACT. — Messrs. Libby, McNeill & Libby. Gentlemen:—The directors of the Col. Ex. Hom. Headquarters and Hospital unanimously agree that your Fluid Beef Extract for both table use and the nourishment of the sick, is the finest in the market. It is pleasant, palatable and nutritious, and thus far we have heard nothing but praise from patients who have been fed upon it. It is now our standard food at the hospital, and the staff is pleased to give it this endorsement.—*W. F. Knoll, Pres't.; A. G. Bailey, Sec'y.*

World's Columbian Exposition, Jackson Park, July 3d, 1893.

SENNINE.—Dios Chemical Co., St. Louis, Mo. Gentlemen:—I have used your preparation called "Sennine" with very good results, and am pleased to note it is doing the same good that I have had from the use of "Aristol," and like preparations, with this advantage: It is a home product, and can be purchased without a bond and mortgage being put on one's accumulations. I cannot say this of "Europhen" and "Aristol," or any of the like preparations of foreign make.—*Roger Williams, M. D., Pittsburgh, Pa.*

FERNINE TABLETS. — A New Uterine Specific for Leucorrhœa and Dysmenorrhœa.—The combination called "Fernine Tablets," has been in my practice for the last year, and the entire profession is under obligations to the Phenique Chemical Co. for getting up the formula in so elegant a form. I have never failed to obtain prompt relief, and in many cases have achieved a permanent cure by its use in obstinate cases of chronic metritis or subinvolution.

The effect upon the discharges of mucus and muco-pus in leucorrhœa is simply wonderful.

For the first time, the active principle of *polypodium vulgare*, known by its English name as "female fern," is used here in the treatment of dysmenorrhœa. This is an entirely new feature of the preparation. The effect of the other ingredients on disturbed action of the mucous membranes lining the female genital tract is well established by long and successful application. I find that it is best to give the tablets after meals, and also one at bed-time.

A valuable adjuvant in the treatment of these cases is the careful attention of proper action of the bowels, which may call for an occasional saline cathartic.—*R. M. Kerley, M. D., Superintendent Female Hospital, St. Louis.*

In selecting your route returning from the meeting of the American Medical Association, in 1894, why not select a route that will enable you to kill two birds or more with one stone. By taking the Northern Pacific railroad not only can you then go and see the Yellowstone Park after June 1st, but you can also become personally conversant with the many hot springs, so efficacious in disease, along the line of the road. Hunter's Hot Springs, Ferris' Springs,

White Sulphur, Pipe Stone and Green River Hot Springs, are all located on or reached by this railroad. Send to Charles S. Fee, General Passenger and Ticket Agent, St. Paul, Minn., 6 cents in stamps for further information, and for our "6,000 Miles Through Wonderland."

MINERAL WATERS.—The Mineral Water factory of Dr. Enno Sander, on Eleventh street, has recently been fitted out with a new and unique apparatus for the distillation of water. The subjoined report gives full information of the many mineral waters issued from this new still. The report is worthy of careful consideration :

St. Louis, Jan. 29, 1894.—Dr. Enno Sander, St. Louis: Dear Sir — I have just completed the bacteriological and chemical examination of the sample of water sent me by you several days ago, and with the following results.

Chemical: The sample answered all of the tests for pure or distilled water. The amount of atmospheric air held in solution was about normal, or possibly a trifle less, but the difference in one pint was so small that it was inappreciable by any instrument at my command, a fact which demonstrates its perfect aeration in the process of distillation.

Microscopical: The most careful microscopical research failed to find a trace of organic matter. An ounce of the water carefully evaporated in a sterilized apparatus to a few drops showed only a few (about 20) of the commoner non-pathogenetic microbes, and these probably got into the sample in the process of examination. Added to culture media previously carefully sterilized, no results were produced, though the plates were kept under observation for an entire week in an atmosphere averaging 70 degrees F.

I, therefore, have no hesitation in certifying the water to be absolutely pure and germ free.—*Frank L. James, Ph. D. M. D.—St. Louis Republic.*

RHEUMATIC FEVER.—

R	Tinct. Aconite Root	3 ss.	
	Liq. Tong. Sal.	3 iii.	
	Glycerine	3 i ss.	
	Ess. Pepsine	3 i ss.	M.

Sig.: Tablespoonful every two hours.

We have used the above in rheumatic fever and gout with delightful results.—*Ed.*

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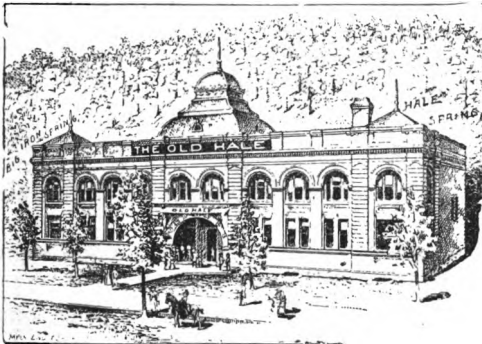
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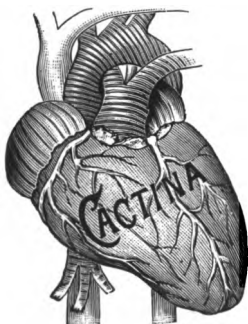
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